# TENNESSEE AIR POLLUTION CONTROL BOARD DEPARTMENT OF ENVIRONMENT AND CONSERVATION NASHVILLE, TENNESSEE 37243-1531



## OPERATING PERMIT (Conditional Major) Issued Pursuant to Tennessee Air Quality Act

Date Issued:

Permit Number:
454621

**Date Expires:** August 1, 2013

Issued To: Installation Address:

Rogers Group, Inc. – Monroe County Stone 197 Campground Road

Madisonville

Installation Description: Emission Source Reference No.

Source 02 Portable Drum Mix Asphalt Plant with Recycle Kit 62-0109
Baghouse Control NSPS

CONDITIONAL MAJOR SOURCE

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

#### GENERAL CONDITIONS:

1. The application that was utilized in the preparation of this permit is dated July 13, 2001, and signed by John P. Torres, Director of Engineering and Environmental Services for the permitted facility. If this person terminates his/her employment or is reassigned different duties such that he/she is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

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 TECHNICAL SECRETARY	

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

POST AT INSTALLATION ADDRESS

CN-0754 (Rev. 9-92) RDA-1298

- 2. The permittee has elected to opt-out of being issued a major source operating permit pursuant to Division Rule 1200-3-9-.02(11)(a). The permittee would be considered a major source because their current "potential to emit" values for sulfur dioxide (SO<sub>2</sub>) and carbon monoxide (CO) were greater than 100 tons per year at the time of application. The permittee has agreed to be subject to limitations in order to be below the major source applicability thresholds for SO<sub>2</sub> and CO of 100 tons per year each.
- 3. Any non-compliance with any condition(s) of this permit set to restrain the "potential to emit" below the applicability thresholds of 1200-3-9-.02(11) of the Tennessee Air Pollution Control Regulations shall be reported in writing to the Technical Secretary within three (3) working days of such discovery. This notification, at a minimum, shall include the identification of the source(s), identification of the permit condition(s) violated, and details of the violation.
- 4. The permittee is placed on notice that **Conditions 7, 8, and 9** of this operating permit contain limitations that allow the permittee to opt out of the major source operating permit program requirements specified in Division Rule 1200-3-9-.02(11). Failure to abide by these limits will not only subject the permittee to enforcement action by the State of Tennessee, but it may also result in the imposition of Federal enforcement action by the United States Environmental Protection Agency and the loss of being Federally recognized as a Conditional Major Source.

Compliance with **Conditions 7, 8, and 9** assures that the source will be below the major source applicability thresholds for sulfur dioxide and carbon monoxide of 100 tons per year of each. This assurance is based on AP-42 Chapter 11, Section 1 (Hot Mix Asphalt Plants, dated December, 2000), and Chapter 1, Section 3 (Fuel Oil Combustion, dated September, 1998) from which the emission factors were used to calculate emissions as shown below:

Parameter	Based on use of Natural Gas, No. 2 fuel oil, or No. 4 fuel oil as fuel				
	AP-42 Emission Factor, Emissions without limiting Emissions with limit				
	Table	lb/ton	conditions, ton/yr	conditions, ton/yr	
CO	11.1-7	0.13	227.8	25.0	

Parameter	Based on use of Natural Gas as fuel				
	AP-42 Emission Factor, Emissions without limiting Emissions with limiting				
	Table	lb/ton	conditions, ton/yr*	conditions, ton/yr	
$SO_2$	11.1-7	0.0034	6.0	0.6	

Parameter	Based on use of No. 2 fuel oil as fuel					
	AP-42 Emission Factor, Emissions without limiting Emissions with limiting Remarks				Remarks	
	Table	lb/1000 gal	conditions, ton/yr*	conditions, ton/yr		
$SO_2$	1.3-1	142(S)	248.8	22.7	S is the fuel sulfur content, in percent (by weight).	

Parameter	Based on use of No. 4 fuel oil as fuel					
	AP-42 Emission Factor, Emissions without limiting Emissions with limiting Remarks conditions, ton/yr conditions, ton/yr					
$SO_2$	1.3-1	150(S)	249.7	22.8	S is the fuel sulfur content, in percent (by weight).	

<sup>\*</sup>Since the fuel sulfur content is required in order to use the AP-42 emission factors to calculate SO<sub>2</sub> emissions, the emissions with and without limiting conditions are based on the maximum fuel sulfur content allowed by **Condition 9.** 

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5. Should proof of compliance for the pollutant(s) with emission limitations placed on this permit be required, the emissions measuring test method(s) and procedure(s) are the following:

Pollutant or Parameter	Testing Methodology
Sulfur Dioxide	EPA Method 6 as published in the current 40 CFR 60, Appendix A
Particulate Matter	EPA Method 5 as published in the current 40 CFR 60, Appendix A
Carbon Monoxide	EPA Method 10 as published in the current 40 CFR 60, Appendix A
Sulfur Content of Fuels	EPA Method 19 as published in the current 40 CFR 60, Appendix A

6. A report stating the compliance status of this source or facility with **Conditions 7, 8, and 9** shall be submitted by March 31 of every year starting in 2004. This report shall cover the preceding calendar year and shall include the records required by **Conditions 9 and 10**. This report shall be mailed to the following address:

Knoxville Environmental Assistance Center Division of Air Pollution Control 2700 Middlebrook Pike Knoxville, TN 37921

- 7. Only natural gas, No. 2 fuel oil, and No. 4 fuel oil shall be used as fuels for this source.
- 8. The production rate for this source shall not exceed 400 tons per hour on a daily average basis and 385,000 tons during any period of twelve (12) consecutive months.
- 9. The sulfur content of the fuel oil shall not exceed 0.5 percent by weight. Compliance with this requirement may be assured by providing an analysis of each fuel oil shipment, or by providing a written statement, obtained from each vendor on an annual basis, guaranteeing in advance that all fuel oil sold to the company will contain no more than 0.5 percent sulfur by weight. These records must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. These records must be retained for a period of not less than five (5) years.

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10. A record of the fuel oil usage, operating hours, and asphalt production at this facility, in a form that readily provides the information required in the tables below, shall be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This record shall be retained for a period of not less than five (5) years.

#### MONTHLY PRODUCTION/FUEL USAGE LOG

Month and Year:							
Date	Hours of Operation	No. 2 Fuel Oil Usage (gal)	No. 4 Fuel Oil Usage (gal)	Production (tons)	Daily Average Production Rate (tons/hr)		
1							
2							
3							
etc							
29							
30							
31							
Totals							

### YEARLY PRODUCTION/FUEL USAGE LOG

Year:						
Month	No. 2 Fuel Oil Usage (gal/month)	No. 4 Fuel Oil Usage (gal/month)	Total Fuel Oil Usage-No. 2 and No. 4 (gal/month)	Total Fuel Oil Usage (gal/12 consecutive months)	Production (tons/month)	Production (tons/12 consecutive months)
January		,		,		ŕ
February						
March						
etc						
October						
November						-
December						

The gallons per 12 consecutive month value is the sum of the Fuel Oil Usage (in gallons) in the 11 months preceding the month just completed + the Fuel Oil Usage (in gallons) in the month just completed. The tons per 12 consecutive month value is the sum of the Production (in tons) in the 11 months preceding the month just completed + the Production (in tons) in the month just completed. The Total Fuel Oil Usage is the sum of the No. 2 Fuel Oil Usage and the No. 4 Fuel Oil Usage.

- 11. Particulate matter (TSP) emitted from this source shall not exceed 0.04 grain per dry standard cubic foot of stack gases (9.9 pounds per hour). This emission limitation is established pursuant to Rule 1200-3-16-.08(3)(a) of the Tennessee Air Pollution Control Regulations.
- 12. Sulfur dioxide (SO<sub>2</sub>) emitted from this source shall not exceed 57.0 pounds per hour. Based on this hourly rate and the production limitations of **Condition 8**, SO<sub>2</sub> emitted from this source shall not exceed 22.8 tons per year.

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13. The  $SO_2$  emission rate shall be determined by using the following equation:

$$SO_{2(lb / hr)} = \frac{GPM}{HPM} \times \frac{1}{1000} \times f \times (S)$$
, where

GPM = Gallons per month of fuel oil used,

HPM = Hours per month of source operation,

f = 150 for #4 fuel oil,

f = 142 for #2 fuel oil, and

S = Sulfur content of fuel (in weight percent).

- 14. Carbon monoxide (CO) emitted from this source shall not exceed 52.0 pounds per hour. Based on this hourly rate and the production limitations of **Condition 8**, CO emitted from this source shall not exceed 25.0 tons per year.
- 15. Emissions from roads and parking areas shall not exhibit greater than ten percent (10%) opacity utilizing Tennessee Visible Emission Evaluation (TVEE) Method 1, as adopted by the Tennessee Air Pollution Control Board on April 29, 1982, as amended on September 15, 1982, and as amended on August 24, 1984.
- 16. Fugitive emissions from this source shall be controlled as specified in Rule 1200-3-8-.01. Specifically, no person shall cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five (5) minutes per hour or twenty (20) minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in Chapter 1200-3-20. Fugitive emissions from this source shall be determined by Tennessee Visible Emissions Evaluation Method 4 as adopted by the Tennessee Air Pollution Control Board on April 16, 1986.
- 17. Emissions from this source not covered by **Conditions 15 and 16** shall not exhibit greater than twenty percent (20%) opacity as determined by EPA Method 9, as published in 40 CFR 60, Appendix A. (six-minute average)
- 18. Routine maintenance, as required to maintain specified emission limits, shall be performed on the air pollution control devices. Maintenance records shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained for a period of not less than two years.
- 19. Upon the malfunction/failure of any emission control device(s) serving this source, the operation of the process(es) served by the device(s) shall be regulated by Chapter 1200-3-20 of the Tennessee Air Pollution Control Regulations.
- 20. This permit is valid only at this location.
- 21. The permittee shall apply for renewal of this permit not less than sixty (60) days prior to the permit expiration date, pursuant to Division Rule 1200-3-9-.02(3).

(end of conditions)